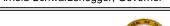
#### DEPARTMENT OF TRANSPORTATION

DIVISION OF ENGINEERING SERVICES Office of Structural Materials

Quality Assurance and Source Inspection

Bay Area Branch 690 Walnut Ave.St. 150 Vallejo, CA 94592-1133 (707) 649-5453 (707) 649-5493



Contract #: 04-0120F4

Cty: SF/ALA Rte: 80 PM: 13.2/13.9

File #: 69.28

# WELDING INSPECTION REPORT

Resident Engineer: Pursell, Gary **Report No:** WIR-004410 Address: 333 Burma Road **Date Inspected:** 25-Oct-2008

City: Oakland, CA 94607

**Project Name:** SAS Superstructure **OSM Arrival Time:** 630 **OSM Departure Time:** 1430 **Prime Contractor:** American Bridge/Fluor Enterprises, a JV

Contractor: Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island **Location:** Shanghai, China

**CWI Name:** Sun Wei / Wang Sei Fa **CWI Present:** Yes No **Inspected CWI report:** Yes **Rod Oven in Use:** Yes No No N/A N/A N/A **Electrode to specification:** Yes No **Weld Procedures Followed:** Yes No N/A N/A **Qualified Welders:** Yes No **Verified Joint Fit-up:** Yes No N/A N/A N/A **Approved Drawings:** Yes No **Approved WPS:** Yes No Yes No N/A **Delayed / Cancelled:** 

**Bridge No:** 34-0006 **Component:** Tower Shaft Components

## **Summary of Items Observed:**

On this date CALTRANS OSM Quality Assurance (QA) Inspector was present during the times noted above for observations relative to the work being performed.

### Bay 2-Tower Shop

This QA Inspector randomly observed ZPMC qualified welding personnel performing groove welding of weld joint ESD1-SA376B/E-1A filler passes. The personnel were observed welding in the 1G (flat) position utilizing a Submerged Arc Welding (SAW) process.

This QA Inspector randomly observed ZPMC qualified welding personnel performing groove welding of weld joint ESD1-SA384A/D-32B filler passes. The personnel were observed welding in the 1G (flat) position utilizing a Submerged Arc Welding (SAW) process.

This QA Inspector randomly observed ZPMC qualified welding personnel performing groove welding of weld joint WSD1-SA279A/F-9Afiller passes. The personnel were observed welding in the 1G (flat) position utilizing a Submerged Arc Welding (SAW) process.

This QA Inspector observed ZMPC welding personnel performing Flux Core Arc Welding (FCAW) of weld joints connecting longitudinal welds on ESD1-SA298F/G-5B. In process FCAW appears to be progressing in compliance with Caltrans Engineer Approved welding procedure.

Bay 1-Tower Shop

# WELDING INSPECTION REPORT

(Continued Page 2 of 2)

This QA Inspector randomly observed ZPMC qualified welding personnel performing groove welding of weld joint NSD1-SA17A/G-17B filler passes. The personnel were observed welding in the 1G (flat) position utilizing a Submerged Arc Welding (SAW) process.

This QA Inspector randomly observed ZPMC qualified welding personnel performing groove welding of weld joint SSD1-SA61A/G-2B filler passes. The personnel were observed welding in the 1G (flat) position utilizing a Submerged Arc Welding (SAW) process.

This QA Inspector randomly observed ZPMC qualified welding personnel performing groove welding of weld joint NSD1-SA17A/G-15B filler passes. The personnel were observed welding in the 1G (flat) position utilizing a Submerged Arc Welding (SAW) process.

This QA Inspector observed ZMPC welding personnel performing automated, in gantry, Flux Core Arc Welding (FCAW) of weld joints connecting longitudinal stiffener plates to skin plate SA179. In process FCAW appears to be progressing in compliance with Caltrans Engineer Approved welding procedure.

This QA Inspector observed ZMPC welding personnel performing Flux Core Arc Welding (FCAW) of Repair #040434 on weld designated as SSD1-SA171A/D-3A(3B). In process FCAW appears to be progressing in compliance with Caltrans Engineer Approved repair procedure.

## Tracking and Log Book

This QA Inspector reviewed the contract files and tracking logs for the Magnetic Particle Testing (MT), Ultrasonic Testing (UT), Welding Procedure Specifications (WPS), Procedure Qualification Records (PQR), and QC Inspector records for the deck panel repairs to date.

### **Summary of Conversations:**

This QA Inspector was informed by ABF personnel that ZPMC personnel were performing Shielded Metal Arc Welding (SMAW)tack welding of double diaphragm plates to skin plates in confined space of Tower Shaft E.

#### **Comments**

This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or remedial efforts please contact Josh Ishibashi (858) 232-6799, who represents the Office of Structural Materials for your project.

Inspected By:	Clifford, William	Quality Assurance Inspector
Reviewed By:	Cuellar,Robert	QA Reviewer